

CHAPTER Env-Dw 300 SOURCES OF WATER

PART Env-Dw 301 SMALL PRODUCTION WELLS FOR SMALL COMMUNITY WATER SYSTEMS

PART Env-Dw 302 LARGE PRODUCTION WELLS FOR COMMUNITY WATER SYSTEMS

PART Env-Dw 303 GROUNDWATER SOURCES OF BOTTLED WATER

PART Env-Dw 304 EMERGENCY BULK WATER SUPPLY FOR PUBLIC WATER SYSTEMS

Env-Dw 304.01 Purpose

Env-Dw 304.02 Definitions

Env-Dw 304.03 Sources of Bulk Water

Env-Dw 304.04 Water Quality Sampling Program

Env-Dw 304.05 Tanks Previously Used for Substances Other Than Water or Food Products

Env-Dw 304.06 Tank and Water Sanitation Practices

Env-Dw 304.07 Delivery

Env-Dw 304.08 Notification

Env-Dw 304.09 Records

Env-Dw 304.10 Waivers

# NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

## PART Env-Dw 304 EMERGENCY BULK WATER SUPPLY FOR PUBLIC WATER SYSTEMS

Statutory Authority: RSA 485:3, I(c); RSA 485:8, II; RSA 485:10; RSA 485:40; RSA 485:41, II

Env-Dw 304.01 Purpose. The purpose of this part is to establish requirements for the use of bulk water as an emergency source of water by public water systems (PWS).

Source. #9577, eff 10-23-09

Env-Dw 304.02 Definitions.

- (a) “Approved source” means a source of water that is either:
- (1) A community water system (CWS) source approved by the department pursuant to Env-Dw 301, Env-Dw 302, or predecessor rules in Env-Ws 300 that is in compliance with those requirements;
  - (2) A bottled water source approved by the department pursuant to Env-Dw 303 or predecessor rules in Env-Ws 300 that is in compliance with those requirements;
  - (3) A CWS source or bottled water source approved by another state acting under the authority of the U.S. Environmental Protection Agency that is in compliance with those requirements; or
  - (4) A source approved pursuant to Env-Dw 304.03(b).
- (b) “Bulk water” means water that is delivered to a PWS in discrete loads using a tanker truck.
- (c) “Bulk water provider” means the person who is responsible for providing bulk water to a PWS.
- (d) “Community water system (CWS)” means “community water system” as defined in RSA 485:1-a, I.
- (e) “Fill pipe” means the connection to the distribution system of a PWS through which bulk water is provided.
- (f) “Finished water” means water that has been treated as required by RSA 485 and the rules adopted pursuant thereto, namely Env-Ws 300 and successor rules in subtitle Env-Dw, such that it is in compliance with the standards specified in Env-Ws 310-315 or successor rules in Env-Dw 700.
- (g) “Person” means “person” as defined in RSA 485:1-a, XIII, namely “any individual, partnership, company, public or private corporation, political subdivision or agency of the state, department, agency or instrumentality of the United States, or any other legal entity.”
- (h) “Public water system (PWS)” means “public water system” as defined in RSA 485:1-a, XV.
- (i) “Tanker truck” means a motorized vehicle comprising a power unit and a tank with hoses, pumps, and other associated equipment needed to transfer the contents of the tank.

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Env-Dw 304.03 Sources of Bulk Water.

- (a) Bulk water provided to a PWS shall be finished water obtained only from a source identified in Env-Dw 304.02(a)(1), (2), or (3) or approved pursuant to (b), below.
- (b) Bulk water provided to a PWS may be obtained from a well that is not a source identified in Env-Dw 304.02(a)(1), (2), or (3) only if all of the following are met:

## NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

- (1) For wells installed on or after August 17, 1983, the well was installed in accordance with standards established by the water well board by a well driller licensed in accordance with RSA 482-B;
  - (2) For wells installed prior to August 17, 1983, adequate well construction and water quality information exists to demonstrate that the well was constructed so as to prevent the direct introduction of contaminants from the surface into the well casing or screen;
  - (3) The well is located at least 50 feet away from surface water as defined in RSA 485-A:2, XIV;
  - (4) The owner of the source maintains a water quality sampling program for the well as specified in Env-Dw 304.04; and
  - (5) The water quality sampling program shows that the water meets the standards specified in Env-Ws 310-315 or successor rules in Env-Dw 700.
- (c) The department shall conduct:
- (1) A regular site visit once every 5 years to confirm compliance with (b), above; and
  - (2) Additional site visits as needed to investigate information received relative to potential non-compliance of the source.
- (d) Surface water that is not an approved source shall not be used as a source of bulk water.

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### Env-Dw 304.04 Water Quality Sampling Program.

- (a) The water quality sampling program required by Env-Dw 304.03(b)(4) shall be as specified in (b) through (f), below.
- (b) A laboratory accredited under Env-C 300 to perform the specified tests shall be used to complete all water quality analyses.
- (c) Subject to (d), below, the owner of the source shall submit all analytical results to the department within 45 days of the completion of the analysis.
- (d) The owner of the source shall submit analytical results to the department immediately whenever any result exceeds the maximum contaminant level established in Env-Ws 310-315 or successor rules in Env-Dw 700.
- (e) Analytical analysis shall use methods that achieve laboratory reporting limits that are at or below maximum contaminant levels established in Env-Ws 310-315 or successor rules in Env-Dw 700.
- (f) The parameters tested and testing frequency shall be as follows:
- (1) Testing once each calendar month for the absence or presence of total coliform;
  - (2) Testing once every 3 years for the following inorganic compounds:
    - a. Antimony;
    - b. Arsenic;
    - c. Asbestos;
    - d. Barium;

- e. Beryllium;
- f. Cadmium;
- g. Chromium;
- h. Copper;
- i. Cyanide;
- j. Fluoride;
- k. Lead;
- l. Mercury;
- m. Selenium; and
- n. Thallium;

(3) Testing once each calendar year for nitrate and nitrite; and

(4) Testing once every 3 years for the following volatile organic compounds:

- a. Benzene;
- b. Carbon tetrachloride;
- c. cis-1,2-Dichloroethylene;
- d. 1,2-Dichloroethane;
- e. para-Dichlorobenzene (1,4-Dichlorobenzene);
- f. 1,1-Dichloroethylene;
- g. Dichloromethane (Methylene chloride);
- h. Ethylbenzene;
- i. 1,2-Dichloropropane;
- j. Methyl tertiary-butyl ether (MtBE);
- k. Monochlorobenzene (chlorobenzene);
- l. o-Dichlorobenzene;
- m. Styrene;
- n. Tetrachloroethylene;
- o. Toluene;
- p. trans-1,2-Dichloroethylene;
- q. Trichlorobenzene;
- r. 1,1,1-Trichloroethane;
- s. 1,1,2-Trichloroethane;
- t. Trichloroethylene;
- u. Vinyl chloride; and
- v. Xylene.

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Env-Dw 304.05 Tanks Previously Used for Substances Other Than Water or Food Products.

(a) Tanks previously used to transport petroleum products, toxic substances, or any non-food products shall not be used until the following is completed:

- (1) The tank shall be thoroughly cleansed using appropriate sanitation methods to remove all previously transported products;
- (2) The tank shall be filled with water that meets the standards specified in Env-Ws 310-316 or successor rules in Env-Dw 700;
- (3) The water in the tank shall be tested for the presence of contaminants associated with the products previously stored in the tank and the cleaners used to sanitize the tank;

(4) The process in (1) through (3), above, shall be repeated as often as necessary until the testing done pursuant to (3), above, shows no trace of contaminants;

(5) Pipes, hoses, fittings, and valves associated with the tank shall be replaced with equipment not previously used to transport petroleum products, toxic substances, or any non-food products; and

(6) The department has approved the use of the tank pursuant to (b), below.

(b) The department shall approve the use of a tank previously used to transport petroleum products, toxic substances, or any non-food products upon determining, based on written documentation submitted by the bulk water provider demonstrating compliance with (a), above, that the requirements have been met.

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Env-Dw 304.06 Tank and Water Sanitation Practices.

(a) Prior to loading water from an approved source, the bulk water provider shall:

(1) Visually inspect the tank and all hoses, pipes, pumps, and other handling equipment for rust or sediment and, if any is found, remove it by rinsing and flushing; and

(2) If the immediately prior load was anything other than water from an approved source, clean and disinfect the tank and all hoses, pipes, pumps, and other handling equipment not replaced pursuant to Env-Dw 304.05(a)(5) using the materials and methods described in (f) and (g), below.

(b) All surfaces that come into contact with water during transport shall be:

(1) Made of a smooth, impervious, nonabsorbent, corrosion-resistant and non-toxic material such as stainless steel; and

(2) Maintained in good repair.

(c) Tanks shall be of the type that can be closed to exclude all foreign matter.

(d) Vents on tanks shall be protected to prevent contamination of the bulk water during filling and emptying.

(e) Bulk water shall be stored, loaded, transported, and unloaded in a manner that prevents contamination.

(f) Prior to using a tank to haul water from an approved source to a PWS where the immediately prior load was anything other than water from an approved source, the tank shall be cleaned using the following procedures:

(1) All debris in the tank shall be rinsed and flushed; and

(2) The tank shall be disinfected using one of the following methods:

a. Using a chemical sanitizer having an equivalent bactericidal action to 50 milligrams per liter (mg/l) available chlorine for 2 minutes at 57°F as an immersion or circulating solution to sanitize the entire tank volume;

b. Using a chemical sanitizer having an equivalent bactericidal action to 100 mg/l available chlorine at 57°F applied as a spray or fog to sanitize the entire tank volume; or

c. Using an ozone water solution with a concentration of 0.1 mg/l of ozone for 5 minutes

# NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

as an immersion or circulating solution to sanitize the entire tank volume.

(g) Liquid sodium hypochlorite bleach used to comply with (2)a. or (2)b., above, as applicable, shall:

- (1) Contain no additives such as scent or cleaning enhancers; and
- (2) Be mixed in the proportions identified in Table 304-1, below:

Table 304-1 Amount of Liquid Sodium Hypochlorite having 5.25% Available Chlorine  
Per Volume of Water to Obtain Resulting Solution

Amount of Water→ Resulting Solution Concentration (mg/l) ↓	50 gallons	100 gallons	500 gallons	1,000 gallons	5,000 gallons
1	0.75 teaspoon	1.5 teaspoons	7.5 teaspoons	2.5 ounces	12.5 ounces
50	6.25 ounces	12.5 ounces	2 quarts	1 gallon	5 gallons
100	12.5 ounces	25 ounces	1 gallon	2 gallons	10 gallons

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## Env-Dw 304.07 Delivery.

(a) A certified water system operator representing the PWS receiving bulk water shall be present at the time of delivery.

(b) The bulk water provider shall provide a copy of the most recent analytical results for the water being delivered to the certified water system operator representing the PWS at the time of delivery if the water is from a source allowed under Env-Dw 304.03(b).

(c) Prior to allowing delivery of bulk water into the PWS, the certified operator representing the PWS receiving the bulk water shall measure the free chlorine residual in the bulk water being delivered to ensure that a concentration between 0.2 mg/l and 4.0 mg/l is present in the bulk water.

(d) If the free chlorine residual is not between 0.2 mg/l and 4.0 mg/l, the certified operator representing the PWS receiving the bulk water shall add the appropriate amount of sodium hypochlorite to make the concentration of free chlorine residual in the bulk water delivered to the PWS greater than 0.2 mg/l and less than 4.0 mg/l.

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## Env-Dw 304.08 Notification.

(a) The PWS shall notify the department in accordance with (b) and (c), below, no later than 2 business days after any bulk water is delivered to customers.

(b) The notice provided pursuant to (a), above, shall contain the following information:

- (1) The name and EPA identification number of the PWS;
- (2) The name of the city or town in which the PWS is located;
- (3) The date and time of each bulk water delivery;
- (4) The name and certification number of the certified operator accepting delivery of the bulk water on behalf of the PWS;

- (5) The reason(s) for delivery;
  - (6) The source of the water delivered;
  - (7) The total amount of water delivered;
  - (8) The name and contact information of the person providing the bulk water;
  - (9) The name and contact information of the individual driver delivering the bulk water;
  - (10) The type of truck used to transport the water;
  - (11) The type of connections used to transfer the water;
  - (12) What measures were taken to avoid contamination during transfer;
  - (13) Location of the physical connection of the fill pipe to the PWS distribution system;
  - (14) The analytical results for the bulk water provided pursuant to Env-Dw 304.07(c);
  - (15) Description of tank inspections and cleaning and disinfection methods used; and
  - (16) Whether the PWS anticipates needing additional deliveries.
- (c) The individual who completes the notice required by (a) and (b), above, shall sign and date the notice.
- (d) The PWS shall notify customers of any bulk water delivered in accordance with Env-Ws 352 or successor rules in subtitle Env-Dw relative to consumer confidence reports.

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Env-Dw 304.09 Records.

- (a) The owner of the PWS that receives bulk water shall:
- (1) Retain a copy of the notice required by Env-Dw 304.08 for not less than 5 years; and
  - (2) Provide a copy of the notice upon request to customers and federal, state, and local officials.
- (b) For community water systems, details regarding bulk water procedures shall be included in the emergency plan of the water system as specified in Env-Ws 360.15 or successor rules in subtitle Env-Dw, if applicable.

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Env-Dw 304.10 Waivers.

- (a) Env-Dw 304 applies to a variety of conditions and circumstances. It is recognized that strict compliance with all rules prescribed herein might not fit every conceivable situation.
- (b) Suppliers of water may request a waiver of specific rules in this part in accordance with (c) through (f), below.
- (c) The person requesting a waiver shall submit the following information in writing to the department:
- (1) Identification of the source or PWS to which the waiver request relates;

## NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

- (2) A reference to the specific section of the rules for which a waiver is being sought;
- (3) A full explanation of why a waiver is necessary;
- (4) Whether the waiver is needed for a limited duration and, if so, an estimate of when the waiver will no longer be needed;
- (5) A full explanation with supporting data of the alternatives, if any, proposed to be implemented or used in lieu of the stated requirements; and
- (6) A full explanation of how a waiver, including any proposed alternatives:
  - a. Would be consistent with the intent of RSA 485, and in particular with RSA 485:10; and
  - b. Would adequately protect human health and the environment.
- (d) The department shall grant a waiver if it determines that the intent of RSA 485 will be met and human health and the environment will be protected. In granting the waiver, the department shall impose such conditions, including time limitations, as the department deems necessary to ensure that the activities conducted pursuant to the waiver will be consistent with the intent of RSA 485 and protective of human health and the environment.
- (e) No waiver shall be granted to any requirement specified in statute unless the statute expressly allows such requirement to be waived.
- (f) The department shall issue a written response to a request for a waiver within 30 days of receiving a complete request. If the waiver is denied, the denial shall specifically set forth the reason(s) for the denial.

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### APPENDIX

<b>Rule Section(s)</b>	<b>State Statute(s) Implemented</b>
Env-Dw 304 (see also specific section listed below)	RSA 485:3, I(c); RSA 485:8, II; RSA 485:10; RSA 485:40
Env-Dw 304.10	RSA 541-A:22, IV